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900 CHAPEL STREET

SUITE 1201

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EXAMINER

DUONG, DIEU HIEN

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

DETAILED ACTION

1. This office action is a response to applicant's amendment filed 09/10/2009. In virtue of this amendment, claims 1-17 and 24-31 are canceled; thus, claims 18-23 and 32-41 are in the instant application.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 18-23 and 32-41 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 39, lines 6-8, the recitation "said card having at least one antenna for projecting a magnetic field along at least one of said sides sufficient to power another element" is not clear. It is not clear for the reasons set forth below:

- a) Which element is "another element"?
- b) The term "sufficient to" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. In this case, it is not clear how strong magnetic field is sufficient to power another element.

Claims 18-23, 32-38 and 40-41 are rejected since they are dependent on claim 39.

Clarifications are required.

Claim Rejections - 35 USC § 102

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4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 18-23, 32-34 and 39-41 are rejected under 35 U.S.C. 102(e) as being anticipated by Haghiri-Tehrani et al. (US 6,839,936 B1 of record).

Regarding claim 1, Haghiri-Tehrani discloses, in Figures 1-2 and 6, a detector of articles comprising a contactless label of the RFID type, said detector also comprising: a card having two faces (see Figure 2) and a plurality of sides perpendicular to each of said two faces; said card having at least one antenna (3, Figure 1) for projecting a magnetic field along at least one of said sides sufficient to power another element; said at least one antenna being formed of N loops and M turns wherein M and N are integers greater than or equal to 1; a plurality of substrate layers (1b, 11, 1a); each of said substrate layers having at least one electrical conductor segment (segment 9 on layer 1b; segment 17 on layer 11); said at least one antenna being formed by the at least one electrical conductor segment (9) on a first one (1b) of said substrate layers (1b, 11) lying in a first plane and being joined to the at least one electrical conductor segment on a second one (17) of said substrate layers (1b, 11) to form one of said turns; and wherein the at least one electrical conductor segment (17) on the second one

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(11) of said substrate layers (1b, 11) lies in a second plane said second plane is not coplanar with said first plane (see Figure 6).

Regarding claims 18-19, as applied to claim 39, Haghiri-Tehrani discloses, in Figures 2 and 6, wherein at least one of the turns of the antenna is constituted by at least two segments (9, 17) extending in different planes; wherein the planes in which the at least two segments (9, 17) extend are parallel with each other.

Regarding claims 20-23, Haghiri-Tehrani discloses, in Figures 2 and 6, wherein the ends of each of two consecutive segments (9, 17) are connected to each other by a bridge (29); wherein the connection between the ends of the segments (9, 17) is such that the antenna exhibits N loops with one turn; wherein the connection between the ends of the segments (9, 17) is such that the antenna exhibits one loop with N turns; wherein the bridge (29) extends perpendicular to the planes of the segments of turn.

Regarding claims 32-33, as applied to claims 39, Haghiri-Tehrani discloses, in Figures 2 and 6, comprising the following steps producing at least one electrical conductor segment (9, 17) on a plurality of substrates (1b, 11) respectively, and assembling multiple layers of said substrates; further comprising a step of producing a connection (29) between different segments (9, 17) of each of the substrates (1b, 11).

Regarding claim 34, as applied to claim 39, Haghiri-Tehrani discloses, in Figures 2 and 6, wherein said card has a parallelepipedic shape and said two faces are parallel and said antenna is contained in said card.

Regarding claims 40-41, as applied to claim 39, Haghiri-Tehrani discloses, in Figure 6, further comprising each of said substrate layers (1b, 11) abuts an adjacent

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substrate layer (1a) and has a size identical to a size of the adjacent abutting substrate layer; wherein said plurality of substrate layers comprises at least three abutting substrate layers (1a, 11, 1b).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 35-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Haghiri-Tehrani et al (US 6,839,936 B1 of record) in view of Goff et al. (US 6,600,420 B2 of record), hereinafter "Goff".

Regarding claim 35, Haghiri-Tehrani discloses every feature of claimed invention except for articles being disposed substantially parallel with respect to each other.

Goff discloses in Figure 10, articles being disposed substantially parallel with respect to each other.

It would have been obvious to one having ordinary skill in the art the time the invention was made to include the arrangement of the articles of Goff in the detector of wireless article of Haghiri-Tehrani to achieve the claimed invention in order to deter theft or other unauthorized removal of articles (see col. 1, lines 21-26).

Regarding claims 36-37, as applied to claim 17, Haghiri-Tehrani /Goff (Goff, Figure 10), the articles disposed closed to each other.

Haghiri-Tehrani and Goff do not disclose a distance of less than 15mm.

However, such difference is not of patentable merits since it would have been obvious to one having ordinary skill in the art the time the invention was made to determine the distance between articles to provide security for the articles. Therefore, to employ having the distance less than 15mm would have been obvious to person skill in the art.

8. Claim 38 is rejected under 35 U.S.C. 103(a) as being unpatentable over Haghiri-Tehrani et al (US 6,839,936 B1 of record) in view of Chung (US 2002/0044096 A1 of record).

Regarding claim 38, Haghiri-Tehrani discloses every feature of claimed invention except for the antenna being tuned, with an impedance of 50 Ohms and with zero phase shift, to have a frequency of 13.56 MHz.

Chung discloses, in Figure 6, paragraph [0054], the antenna being tuned with an impedance of 50 Ohms and with zero phase shift, to have a frequency of 13.56 MHz.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the tuning circuit of Chung in the detector of Haghiri-Tehrani in order to provide best detector response (see par. [0054]).

Response to Arguments

9. Applicant's arguments filed 09/10/2009 have been fully considered but they are not persuasive.

Applicant argues that Haghiri-Tehrani fails to disclose a card has at least one antenna for projecting a magnetic field along at least one of said sides sufficient to power another element.

Examiner respectfully disagrees. Even though, Haghiri-Tehrani does not explicitly disclose that the coil 3 being an antenna, a person skill in the art of antenna would be understood that the coil 3 is an antenna (see JP06336096, paragraph [0008]).

The Notice of appeal dated 09/10/2009 has been considered and persuasive, therefore, the amendment has been entered.

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Inquiry

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to DIEU HIEN T. DUONG whose telephone number is

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(571)272-8980. The examiner can normally be reached on Monday - Friday, from 8:30AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas W. Owens can be reached on 571-272-1662. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/Trinh Vo Dinh/

Primary Examiner, Art Unit 2821